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SEPTEMBER, 1964

# CAMERA CRAFT



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San Francisco California

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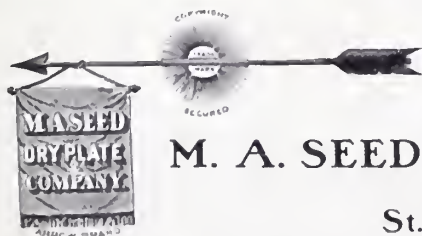
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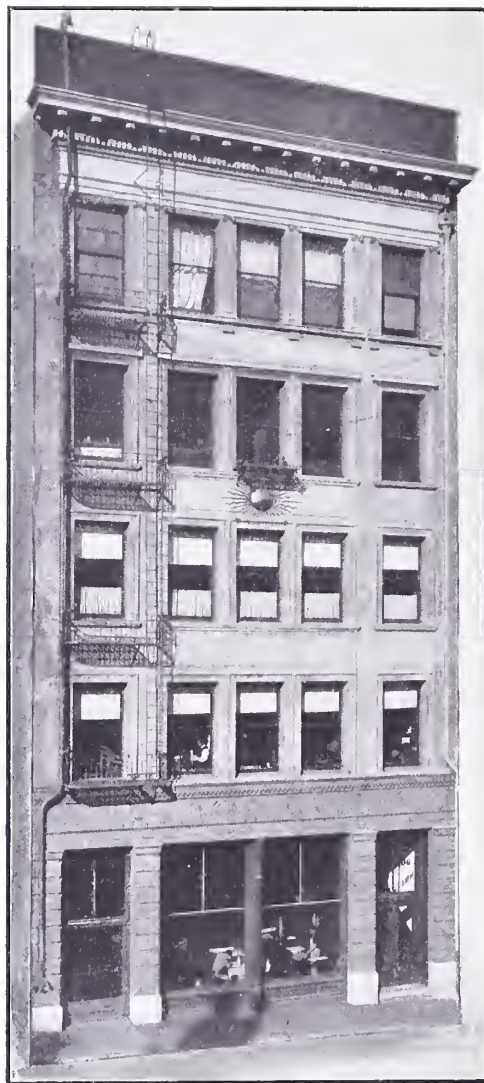
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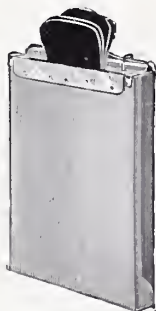
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*by* W. E. DASSONVILLE

# CAMERA CRAFT

A PHOTOGRAPHIC MONTHLY

VOL. IX

SAN FRANCISCO, CALIFORNIA, SEPTEMBER, 1904

No. 4

## Monster Enlargements by a New Method

*In asking Mr. Bried for a detailed statement of the particulars connected with the production of the picture which recently called forth so much comment, CAMERA CRAFT met with a most hearty response. All available information was placed at the Editor's disposal. At the earliest possible moment permissible, full working details and drawings will be given us for publication. These will be presented to our readers in a later issue, but it might be well to state that the illustration now given of the camera is not an absolutely correct picture of the instrument as used, or to be used in future work. To secure that protection which is as necessary as it is justifiable, exhaustive search of patent records is requisite, necessitating a delay in giving full publicity to the details.*

Little more than a year ago, three young men came together to establish a commercial photographic printing establishment. These were Wilfred E. Smith, operator for Thors studio; Richard A. Towers, head printer in the same establishment, and Julien A. Bried, a mechanical and photographic experimentalist. The Towers Company was formed. The range of their capabilities covering as it did every form of photographic printing, as well as the high quality of their work, early gave them the business of the coast. The popularity of bromid prints, the high favor which the process was accorded in the best studios, both for contact printing and enlargements, convinced them that but a few years were required in which to see this process used exclusively by the leading workers. Another significant trend was observed. The demand for very large work (enlargements), was found to be far in excess of the capabilities of the average producer. Particularly the advertisers who used such work had discovered that the power of a large picture to secure and hold attention, quality of course being equal, was in an ever-increasing ratio to the superficial area of the photograph presented to their attention. As the value of an enlargement ten feet in length exceeded that of a ten-inch photograph, so does a thirty-foot enlargement multiply the value of the same picture far in excess of its multiple of the surface.

The loss of sharp definition resultant from great enlargement in the ordinary way as well as the difficulty and expense found necessary in the production of satisfactory work by any method of vignetting together the results of several negatives while enlarging, not to mention a third process calling for the use of several enlarged negatives and their combining on printing-out paper, convinced these gentlemen that an entirely different method was needed.

The production of an enlargement, eight feet in height from a 5x8 negative, made with all the care and all the skill that could be brought to bear upon the ordinary method of working, convinced them that there was a well-defined limit



RICHARD A. TOWERS

difficulty the panoramic, film negative is moved past the lens at one (the minor) focus, while the sensitive at the other (or major) being relative to the times this way successively pre- the negative to the center much more than is at first distortion is done away equal sharpness from end illumination is likewise While seeming no great eacy of the mechanism is touch given one of the driving apparatus would an inch or more at the days were spent in the siasts in the work of adjust-

a degree of accuracy that, with sufficient enlargement, the original grains of silver forming the deposit in the negative, could be plainly distinguished. A motor of constant speed making 18,000 revolutions per minute is employed to drive the machine, and with the perfected apparatus now used a thirty-foot print requires, in the exposing of the bromid paper about five minutes.

It was early discovered that a panoramic camera capable of producing a negative having the requisite sharpness and quality to make possible a magnification of seventy-five or one hundred times, was not on the market. To produce such a camera was the next task these gentlemen set themselves. A fine lathe and other mechanical appliances of the best quality were installed, and night after night, the regular business of the firm requiring their attention through the day, found them busy until

to such methods. This picture, shown at the last convention here, was highly commended for its wonderfully fine quality. To the task of evolving a new process or method whereby this limitation could be overcome, Mr. Bried at once applied his knowledge of mechanics and photography as well as his inventive talent. From drawings prepared by him the three co-workers constructed a machine by which the production of enlargements from the ordinary panoramic cameras was made much more satisfactory. Enlarged in the ordinary way, these films, measuring as much as forty-five inches in length, present great difficulty; for to cover such sizes with a lens of perfect defining power and equality of illumination, is practically impossible.

In the machine constructed to overcome this paper is being carried past focus, the speed of course of enlargement, and in sending every portion of of the lens. This means apparent. All marginal with, the projection is given to end of the film and the uniformly distributed. accomplishment, the deli- such that the slightest steel belts operating the cause the image to "jump" focal plane. Over three dark room by the enthusing the mechanism to such



JULIEN A. BRIED



WILFRED E. SMITH





WASHING THE THIRTY-FOOT ENLARGEMENT  
(Developing was done in the same tray)



ROCKING THE BIG TRAY  
(Developing was done at night)



THE SUBJECT EMPLOYED IN MAKING

*This small reproduction of the thirty-foot enlargement does little more than suggest the opposite side of the bay are clearly defined. The small parallelogram enclosed in a of image secured with the great magnification required in enlarging from is simply perfect, but the fineness of detail is*

long past midnight. The camera was soon completed, and their energy and enthusiasm were rewarded with success if not a very finished piece of mechanism. The camera employs a film seven inches in width and of any length. It is of the revolving type, turning upon a pivot at the same time that the sensitive surface of the film is drawn past a small slot at the focal plane of the lens. Any part of a circle can be embraced as well as one or more complete circles if desired. Of course such application of the revolving principle is not new, but in the camera devised, that heretofore unconquered difficulty, vibration, has been overcome. In all previous attempts to apply this method of working, vibration has resulted in negatives entirely unsatisfactory for great enlargement.

In this new camera, the film travels at a speed of from twenty to eighty inches per second. A complete circle requires a film six feet in length. Vibration is entirely overcome, and the resultant negatives are as sharp and well illuminated from end to end as the center of the best negative taken in the ordinary way upon a stationary glass plate. Some score or more of negatives embracing every class of subjects, have been made and all are most perfect. The one herewith reproduced was enlarged upon the largest obtainable sheet of paper, and measured three feet five inches by thirty feet. It was displayed to the public in one of the local retail establishments for a few weeks, and is now on exhibition in Honolulu to be returned later.

The first large print was made and developed in a somewhat crude manner. Our illustration shows the print being rocked in the tray. About forty gallons of developer were required. Machinery has been designed and in the near future, developing, washing and drying will be done entirely by machinery. The actual cost of producing the first big print was more than \$200.00, although several times that amount was expended in the preliminary experimenting. The interest of G. A. Turner, one of our prominent real estate men and himself a photographer of no mean ability, was early enlisted by the inventors and several thousand

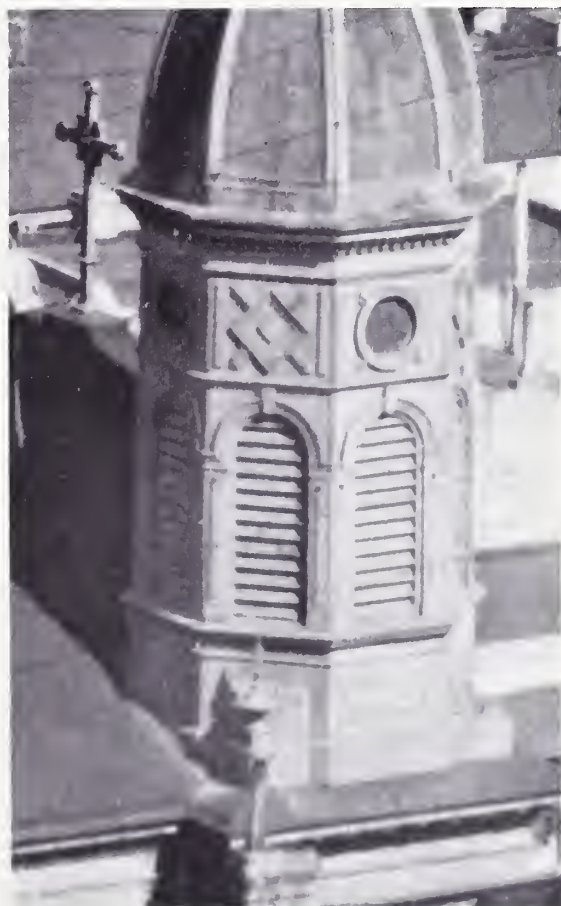


THE THIRTY-FOOT ENLARGEMENT

*capabilities of the method. In the original, buildings on the Marin County shore on the white line is shown exact size in the cut below; demonstrating the wonderful sharpness of the sixty-inch film up to the thirty-foot picture. The quality of the negative is fully appreciated when enlargement is undertaken.*

dollars were placed at their disposal with which to carry on the work. A company has been formed to exploit the work made possible by the new method. It will be known as the American Panoramic Photo Company, with offices at 312 Montgomery Street, this city. The members of the firm are: G. A. Turner, president and manager; Bruce Cornwall of the law firm of Monroe & Cornwall, and Messrs. Towers, Smith and Bried. Plenty of means are at their disposal and success is assured. The regular work will consist of prints up to fifty feet in length, although orders for work up to one hundred and fifty feet in length will be undertaken on special orders. As explained, full detailed drawings will be given CAMERA CRAFT readers at the earliest possible moment.

Before leaving the subject it might be well to explain that enlargements produced by this





method have nothing in common, other than size, with the large panoramic pictures produced by photographic means from time to time in this and foreign countries. Enlargements made from several negatives vignetted together and printed on a continuous strip of paper are lacking in that uniformity of perspective which characterizes so strongly the work produced by the newer method employed by Mr. Fried and his associates. Even in the production of the smaller sizes easily within the capabilities of the ordinary appliances the superiority of the new method readily asserts itself by reason of the fine definition, uniform illumination and other good qualities secured by reason of the peculiar construction of the apparatus which employs only the central portion of the field covered by the lens. Not alone is this



the case in making the negative but in again using the good offices of an objective in producing the enlarged image upon the bromid paper.

Another great advantage possessed by this new method is the practical elimination of all risk of failure and consequent diminution of loss of time and material. Fully equipped machinery will not only insure correct and continuous uniformity of exposure in enlarging upon the bromid paper, but developing, fixing, washing, and drying will all be done automatically by machines capable of producing results more satisfactory than by any method of hand manipulation and in a much more rapid manner; in fact, the process has in its favor that element so often lacking in newly devised methods—entire practicability.

# The Rod and the Camera

By OSMOND WILTHEW

## SECOND PAPER



IN the accompanying photograph, entitled, "Gaffing Leopard Shark," is illustrated, in part, an incident that occurred in the Elk Horn Slough, California. During the last hour of an ebb-tide, and as the sloping banks of mud were gradually laid bare by the receding water, the writer and his companions, in an anchored boat, were, for some minutes, puzzled to define at some distance down the slough the sudden appearance of what seemed like an army of propeller-blades protruding above the water-line, serrate and scattered, and having a wabby action as it clouded the shallow flats with the red tint of the mud. We watched its slow approach and after a short interval we found it to be the dorsal fins of a shoal of leopard sharks. They appeared to be digging their noses in the mud, and were evidently bent on some object, the purpose of which we were unable to determine.

Here was a curious sight and one immediately inviting to the camera.

The backs of the fish were now well in view as they approached the boat, and failing to make them take bait we promptly resolved to try conclusions with our gaffs. They passed, or, rather, half swam half wriggled close to the boat and seemed unaware of it, for many rammed their noses against its sides and then felt their way around it. To use the popular phrase, "it was a picnic" with the gaffs, amidst much scrambling and splashing of water all over ourselves and the boat.

The writer made several exposures on what was really the unique feature of the situation: the advance of the shoal with its hundreds of dorsal fins standing out of the water, with here and there, a strip of spotted back and an occasional swirl of the water where a big fellow would whip his tail. But the negatives proved unintelligible. An expanse of water dotted all over with dark blotches and a distant edge of bank-line completed the picture. A little more deliberation of resources, and very likely, the result had been a success. It was possible to have stepped out of the boat in boots, and deliberately gaffing a large shark and stranding it in still shallower water, to have composed it against an immediate background of fins and distance and to have accomplished with three or four exposures one or more good negatives of the character and spirit of the incident. The quality of the light and other conditions were favorable, and the nature of the situation afforded ample time; but, too late, the thought came to the writer through the evening chat of the day's performances and the soothing puffs of a sweet brier. The incident serves, very aptly, to emphasize the necessity of infinite pains and ingenuity to compass the possession of rare and original pictures under difficult circumstances.

Salt-water fishing presents certain elements of zest which are absent on the stream. Here, we are mainly affected by the prevailing sense of peace and poetic languor, whereas on the open waters of bay or ocean, we are attended by the impressions of mighty forces which induce a pleasing sense of stirring adventure and possible danger.

The writer, however, much deplores the awkward moment when, suddenly precipitated into a very trying and awfully wet situation, the camera was not immediately in good working order to convey to the sympathies and imagination of his friends and the public the very realistic recognition of what is so easily described in dry clothes and a comfortable lodging, as, "the sense of stirring adventure and possible danger."

A well-known angler, and a skilled hand with the camera, was out one day under sail trolling for quinnat salmon in Monterey Bay. It was a season of unusual winds and heavy weather, but the salmon were running in large numbers and big size. The

firmed spirit of the to be resisted, and, the services of a pro-his boat in order to

There are times the pressing character makes one slur the prudence, and disposes things that should sug-undesirable contingen-anecdote had selected additional feeling of by reputation, and a competent and vet-sailed the waters of thirty years, and had fellows one of the most boatmen in pursuit of was not so large nor of model peculiar to the probably, desirable perience hand. It was suasion, too, that our into some show of in-out, for, as a matter

in that frame of mind and feeling of body which much desired to complete the last, lingering hours of a thick lethargy in the sensuous fuddles of what is popularly and aptly defined as "a hold-over." In short, Michael had rather—much rather—have dwelt in his reactive exhilaration and dreamed again of the daring exploits which had bandied his name on the tongues of men and made it a terror to the whale. And in a manner of bravado, funny in the hearing of others, Michael always accented his bibulous contemplations, or their recital, by the emphatic boast that he had executed many deeds on narrow chances and with hair-breadth escapes, and, yet, withal, couldn't swim a stroke!

It was under these circumstances, then, that all was got ready; and everything properly stowed, Michael slipped the moorings of the "Archangel" and put to sea. There was quite a fleet out engaged in fishing for salmon, dotting its white and parti-colored sails over the breaking crests and swells of the bay.



temptation to a con-fishing type was not forthwith, he engaged fessional fisherman and exploit his luck.

when enthusiasm or of uncommon chances finer considerations of an easy indifference to gest the likelihood of cies. The hero of our his boatman with that esteem that is induced which described him as eran salt who had Monterey Bay for been accounted by his skilled and daring of the whale. His boat the usual double-bow salmon fishermen, but, enough under his ex-not without some per-angler induced him clination to take him of fact, Michael was





A RUSSIAN RIVER STEELHEAD  
DEPUTY STATE FISH AND GAME  
COMMISSIONER M. L. CROSS

As an experienced angler should be, ours was equipped with the most approved rods and reels well calculated to meet all possible conclusions with such a gamester as the quinnat salmon; and he had not forgotten a hand-camera of the first make and convenience in the pleasing prospect of recording the largest fish of the season, and any interesting incidents connected with the trip.

The "Archangel" heeled over, exerting a certain sympathetic harmony with Michael's feelings, and had not gone long to the full temper of the elements when the first strike brought a warning yell to the Irishman, who slacked away the sail and let the boat swing to the tension of the fisher's line. She pitched and rolled, ducking her nose and gunwales under the curling edges of the swell, Michael, a bit dreamy, watching with uncertain and querulous eye the sway of the boom, while the angler, forgetful of all else, rejoiced in the merry tune of his reel.

The quick succession of strikes had reached the eighth fish, and the ninth salmon had been brought to gaff. Michael, at the tiller with the sheet close-hauled and on the starboard tack, had been keeping the boat on short legs for quite a spell, and, as it seemed, getting away from the locality of the fishing.

"Oh, Mike!" hailed the angler, from his seat in the stern, "Get about—I guess we've quit the tracks of that school!"

"Oi, sorr," replied Michael, who at that moment, with the boom-line made fast, bending low in the boat, was straining to catch a light in his black cuddy.

The order to turn about had been barely uttered by the angler, when his lure was hard-struck by a vigorous fish, and to Michael, he promptly called to slack away the wing. The latter raised his head with a jerk on the call from the fisher, and a sudden gust lifting his hat started to take it over the port bow. Michael scrambled for it, the boat sheered a bit, and turning over to port, a violent puff of wind caught her stiff and square on the starboard beam, filling her fastened sail and causing her to turn turtle quicker than a somersault.

It is at such moments, gentle readers of CAMERA CRAFT, that we would turn with haste and ineffable emotions to our beloved cameras, so well prepared for these heroic incidents, if it were not for the clumsy nature of the situation. It does seem so disappointing to all our well-laid plans and sincere intentions, that we cannot carry the former to a Providential hearing and arrange for a safe and convenient series of tableaux for the exercise of the camera, in pleasing contradiction of natural laws, on these critical and impressive occasions. Fancy the exciting effect that a truthful portrayal of such an event through the eye of a camera would produce on the imagination—consider the variety of pictorial suggestion that would appeal to every sort of feeling, as, in this instance, from the humorous wails of terror-stricken Michael to the presence of mind and determined conduct of a plucky angler.

Our fisher rose to the surface with all his wits well about him, and, still holding to the rod, whose reel would birr by jerks, struck out for the boat which was keel up and not far distant. As he drew the first breath he was roughly seized by the collar of his sweater, and the repeated and sobby appeals to the Almighty proclaimed the terror of the crazed Michael, who choked and gasped for mercy and salvation. The angler supposing the great whale-hunter capable of his own help, jabbed him a penetrating dig in the ribs; but Michael never grabbed a whale-line with half the strength that closed his fingers on the folds of that sweater. The struggled continued, while the angler steadily urged every atom of his power in the

direction of the boat, Michael still hanging to him and vociferating, between gulps of water, piteous calls upon the aid of Heaven.

The angler was heavily clad, and the only thing of which he was relieved was his hat, but that of Michael had stuck close jammed over his ears like the paralyzed look of fear that spread over his face. At length they neared the boat

by the stern, and Michael made a mighty jostling on to her keel followed by the fisher, but this was too much for the boat, and she dipped herself and load under the water. Michael hung on

to the "Archangel," listening for the call-bells of the Resur-

rection, but stayed fast by the stern. The weight off, the boat floated

again as before and the angler, lifting Michael's hat from his head, made

his way to the bow, the rod still in his grip. The reel had ceased

to click for most of the line had been drawn from its spool, and,

possibly, the captive salmon was contemplating from a distance,

the plight of his human tyrants and their unwilling invasion of his

native element as the retribution of just desserts. Accommodating

his gradually exhausted body at the bow by leaning against it

and resting his arms by turn over the keel-board, he first considered

very undesirable possibility of a tangle between the lace-hooks of

and the long and spreading bights and their sweep of his

kle. So, with bitter regrets, he concluded to abandon his fine

this decision was the more distressing because of the effort

de to save it. Moreover, under the increasing pressure of

stances, it was getting to be a burden too irksome to sustain.

affectionate look and a feeble squeeze of the handle in his

hand, he threw it from him, catching a glimpse of the

glimpse of the hid for-

sive outfit with a big fish at the

the line. Michael was clinging to

astern, with the aid of St.

ing his length, between ducks,

nch of sacks, and muttering

forgotten prayer under the stern

ious fervor. The angler turn-

very serious question of a rescue,

effort to attract the notice of the

hat, and, after a short spell, he

observe several boats bearing down

ting beyond the limits of his

and his flesh was already an

this moment the first boat bore

wreck at the stern,

dazed and half-

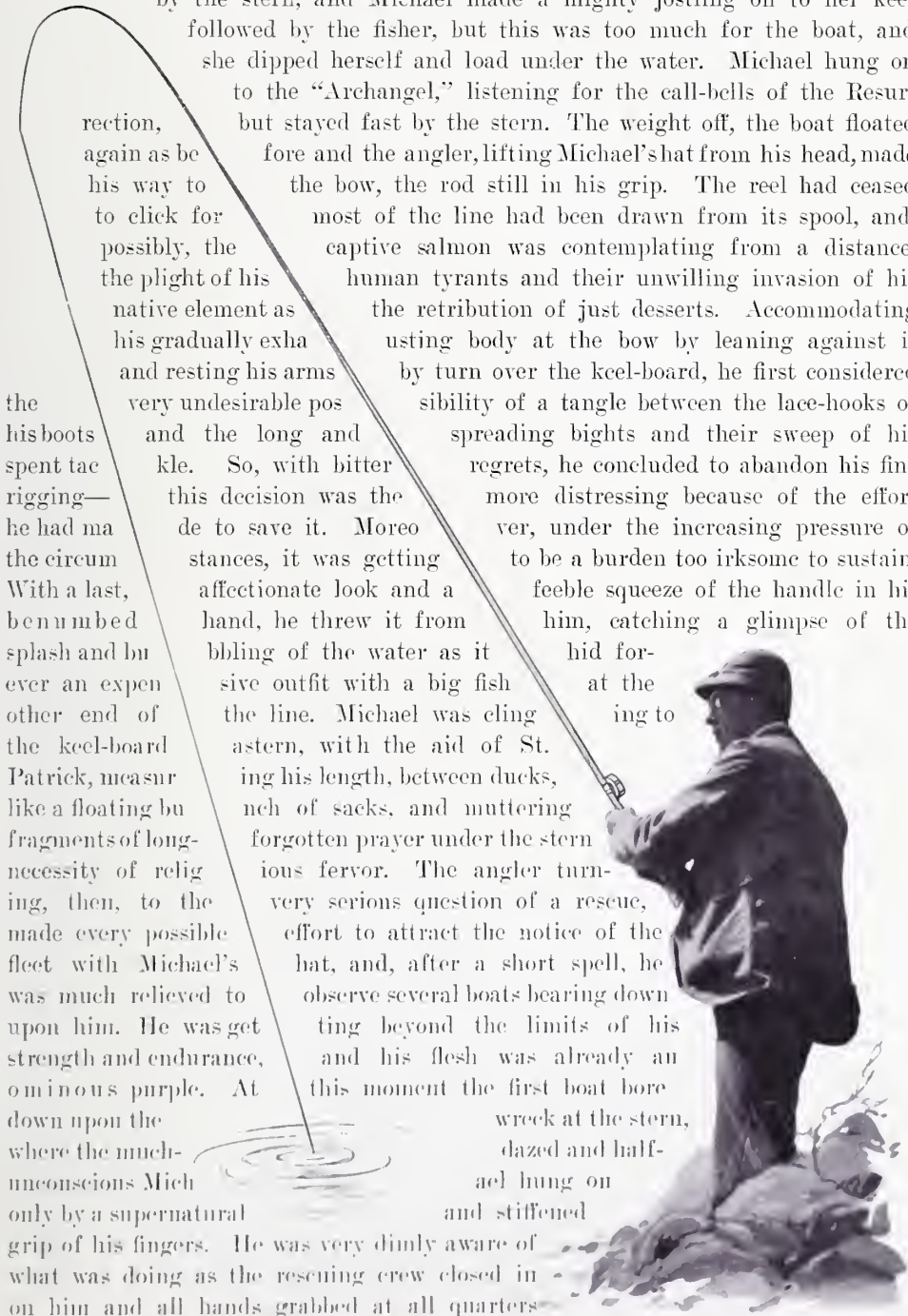
ael hung on

and stiffened

grip of his fingers. He was very dimly aware of

what was doing as the rescuing crew closed in

on him and all hands grabbed at all quarters



and dragged him aboard. The angler was not so soon nor so well approached. Another boat in the wake of the first sailed past him, and an awkward hand cast a line both ends free to the bow of the wreck. Its coils lighted near him, and taking hold of them he turned to look for the other end: but what was not in his hand was under water. The boat then tacked about, and making a better approach came within a few strokes of the "Archangel," when seizing a second line that was thrown him, he struck out from the wreck and was hauled on board. His first moments of reaction may be readily conceived; his face and hands looking the color of purple ink, he nearly collapsed, notwithstanding copious and frequent drafts of liquor. It was hours before his nerves responded to the least energies of the will.

Michael, after much punching and rubbing, and the endless pouring of whisky down its accustomed passage, was restored, in a measure, and returned to the bleak shores of his home on Monterey Bay. But he was very noticeably silent concerning certain things that happened on board the "Archangel," and not even in his bibulous reflections does he allude to the moment when he needed a light in his black cuddy. A wave of remarkable modesty also overtook Michael's feelings toward his patron, the angler, and with a very becoming show of silence omitted to ask him for the hire of the boat.

This perilous situation lasted for a full half hour, and the valuable fishing rigs and camera of the angler, not to mention the fish, were consigned to the bottom of the bay—the deplorable reflection of the writer is, that the camera in that position, and without the tripod, too, was of no avail to picture it at any time, nor was he in the fortunate attitude of a rescuer to use his own instrument and to congratulate his esteemed friend on a very narrow escape.



THE CASTLE

BY WENDELL G. CORTHELL



# An Automatic Shutter-Release for Ten Cents

By BERNARD C. ROLOFF

No doubt many of the amateurs who read this have seen various automatic shutter-releases advertised in the photographic magazines, costing from \$1.50 to \$2.50. These little devices have their uses but few of us care to invest this amount of money for one of them.

The following description and accompanying sketches will enable any one to make an ingenious device of this nature for himself, far better in fact than any to be had on the market, at a cost not to exceed ten cents.

The sketch, Figure 1, shows a tube four and one-half or five inches in length, quite thin, and of about one-half inch inside diameter. It is preferable to have it made of steel or aluminum, but if this cannot be procured, other metal will do, or even a glass tube of approximately this length and bore will serve the purpose. If made of metal a piece of gas tube turned down quite thin will be just the thing. The lower end *a* should be closed. If you determine to use glass, a glass bottle without a neck will do admirably, and saves plugging one end. Do not have the glass too thick, and the inside must be smooth its whole length. No matter what kind of a tube is used a rubber cork or a wooden plug the exact size of the interior should be forced tightly into the same as shown at *b*, about one third or probably one fourth of the length of the tube down. Be careful about breaking the tube if glass is used. Before inserting the plug, which by the way need only be about three eighths of an inch thick, cut a very small notch into the same. See Figure 2.

Now the tube is divided into two compartments, *c* and *d*. Into the upper compartment pour about one and one-half ounces of clean mercury. Before closing up the upper end of the tube provide a piece of strong wire three or four inches in length, not easily bent, and after turning a short part of one end, as shown in Figure 3, so as to catch into the plug, insert the plug with the wire, leaving two or three inches protruding.

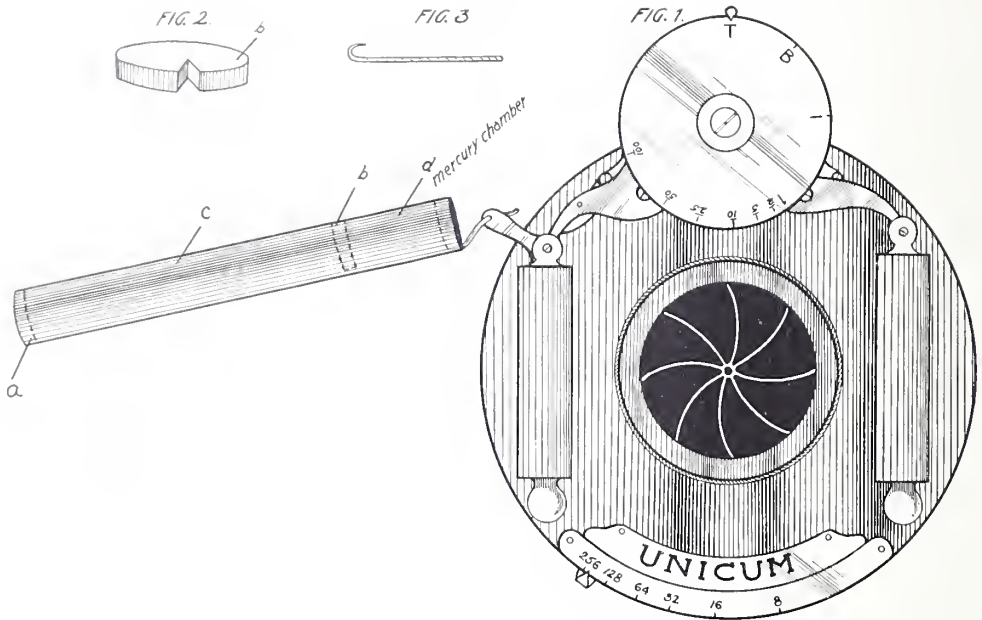
Now, if you are using a Unicum shutter it is only necessary to insert the end of the wire into the hole in the finger-release of the shutter, set the same and await developments. The mercury will drop into the lower compartment until that end becomes heavy enough to draw down the finger-release and operate the shutter. Unless the spring of your shutter be unusually strong it will work like a charm. If the spring be too strong the upper plug should be taken out again and more mercury poured in. To return the mercury to the upper chamber it is only necessary to carry the device in your vest pocket, upper end down, and it will soon return to place.

Should you have a shutter not having a hole through the finger-release it might be well to drill one through, or have it done for a few cents, or if that be too much trouble, then the wire protruding from the shutter-tripper may be bent so as to catch the finger-release in some way, so that the tube will hang from the finger-release at a slight angle, as shown in Figure 4. It is easily done.

Now supposing that you wish to take a landscape with yourself posing in the foreground, it is only necessary to arrange your camera as you want it, set the

shutter, attach the release and immediately take your position. Wait until you hear the shutter click, then walk back to the camera and remove the tripper.

By changing the size of the opening cut in the inside plug or varying the amount of mercury in the tube, or both, the length of time it takes to operate



the shutter can be easily changed. Time the device when finished and remember how long it takes. From ten to fifteen seconds is long enough for most purposes, but that is at the option of the maker.

The writer will soon have the above tripper on the market to sell at a small price, including attachments enabling the user to vary the time at will.

## Reversal in Cases of Under-Exposure

A note by M. Guéhard, which touches on several controversial points (*Bulletin of the French Photographic Society*, 1st April issue, 1904, p. 189), discusses the question whether the reversed images occasionally obtained after extremely short exposures are not in reality of a nature similar to that red fog which so often attacks under-exposed plates, and which is so notably prominent on the clear parts of the negative. In the case of one particular make of French development paper it was found that when a diamidophenol developer was used the coloration of the whites was always the first phase noticed, this giving a negative effect by reflected light, this negative effect passing through citron to orange, red, chocolate, and brown, but the development of the true positive image soon masks this effect. Still when the preliminary positive is formed, there must almost inevitably be a softening of the resulting print. Quite apart from all questions of theoretical interest it might be a matter of practical importance to keep watch for any preliminary reversed effect when testing plates or paper; although it by no means follows that an early element of reversal must of necessity be objectionable in all cases.

# A Chain of Salons

By WALTER ZIMMERMAN

The title is a taking one. The idea is still better, and the possibilities which the suggestion gives for artistic photography are beyond any one man's words at the present moment. Several men thought of the same thing at about the same time. Monsieur Demachy of Paris was first, in point of time, and, while Mr. Clute was writing in *CAMERA CRAFT* of the Demachy idea, the writer was making the suggestion to Mr. Clute, and to others, naming it as above and proposing further details. It is the outgrowth of opposing propositions. First, that salon exhibitions of picture-photography are good things for the cultivation of photography as a fine art. Second, that there are many disappointments and needless expenses connected with exhibitions, both with the exhibition committees and the exhibitors themselves. These propositions have been very fully written up, but a few words are needed to convey the right meaning of the suggestions now being made.

First-class picture-photographic exhibitions are helpful to the public, to the worker and to the exhibitor. To the public they are educational; to the worker, helpful and instructive; to the exhibitor they are necessary in order that he may gain the true appreciation or depreciation of his own work. The day of "monstrosities" masquerading as art is over, or nearly so. The low tones for sunlight pictures, the bolting-cloth atrocities and similar freaks have had their day; and even gum things, which are frequently artistic, are no longer believed to be necessarily so, just because they are gum. In this day of the renaissance of sanity in art-photography, the need of frequency and regularity in art exhibitions of photography is greater than ever.

On the other hand, the difficulties in the way of the exhibition committee and the would-be exhibitor have become greater than ever. Some annual exhibitions have been dropped. Recent ones have not shown the strength of purpose or success that they should. What is the reason? There are two causes, timidity and lack of concurrence, which apply equally to the committee and to the picture-maker. I will touch lightly upon the first of these. There has been a much-paraded association, with a distinctly un-American name, which is thought by very many to be a great, big bugaboo. "If we were to act upon our own responsibility, the Bugaboo Society will not send its last century prints for our exhibition." "If I send *my* things to this exhibition, the Bugaboo Society will not invite *me* to be a member, and will not invite *me* to hang with it." It is the appeal to the "me" and the "my" which has told with so many people. If the people who have said and thought this will but forget the *me* and the *my* and the Bugaboo Society, and will remember and work for the *cause*, artistic photography, their efforts will result in good that will be far better and far greater for themselves and for others. For my part, I would rather forget the Bugaboo Society entirely, and rather not have to write of it at all, except that it comes right up—in the arguments of many people who think more of self than of principle—in the questions apropos of holding a series of salons in the large cities from Maine to California, with the exhibitors in one exhibiting in all. Argument is not needed to convince the reader of the



importance of this new movement, since the proposition speaks for itself. Difficulties have to be overcome, and many details are to be worked out. The plans cannot be laid in a moment. Those who labor in this field are laboring for their love of the art. The great difficulty has been apathy or passivity. Nothing is more disheartening. Now, where does the "chain of salons" come in, with all these statements of present conditions?

Take the exhibitor: There are in this country about six hundred people who have had their work "hung" in the various more important salons of the present century. Those who have offered their work once, have had it then excluded, and, through disappointment have never tried again, would probably make a list several times as great. And yet this first exclusion was perhaps on account of some small defect, the printing paper, the mount, the frame, or something which

inquiry as to the cause and one or two repetitions of effort would remedy. Many of the very artistic workers in the country remain unknown, considering themselves to be "non-elects." Many who have the knack of passing the juries refrain from sending work on account of the expense and doubt of acceptance. It is a long reach from San Francisco to New York and vice versa. It is not only that freight charges are heavy, and the more convenient express more expensive still, but the frames are for so long a time away while they might be wanted for something near home.

Here is precisely where the "chain of salons" steps in. It will be opened with an exhibition of surpassing merit, in a large city, with a strong committee, and with jurors of the highest knowledge and influence. The work selected at that exhibition will be hung, without variation, at another large city, and the show will be repeated from place to place until the season is over and the work is distributed. The exhibitor will have something worth sending, something justifying his best efforts. He will have his accepted work hung at three, four or ten or more art-exhibitions, and will have but one bill of charges to pay in sending to the first place, and another in returning the work from the last place. Better still, for those



who do not have to think of the expense, there will be no conflicting dates. The exhibitors send their pictures, and the committees do the rest. The exhibitors get their catalogues from the successive shows, and sales of the best pictures are announced by the respective societies.

Exhibitors will either prepare one or more copies, ready to send promptly to each committee which informs him of a sale (and these copies may be sent by mail, the committee duplicating the framing), or he may decline to sell. Sales are desirable from every standpoint. They lighten the cost of exhibition photography, they show the appreciation of the visitors, and the commissions aid the exhibition. The buyer knows that his is not the only print from the negative. If it were, he would, in many cases, have to pay many times the price. The cost of a single print from a famous negative, with the assurance that it is unique, would place photographic prices much higher than average prices for brush and pencil work. It is alone the possibility of duplication which keeps photography in art low priced. This verges upon digression, but it is an important suggestion.

Your second question is: What shall be done with our local talent, which we wish to have "in our midst" and which has neglected to send to the original exhibition? The remedy is easy. Let the local jury examine and hang the local work, but hang it separately, keeping the main exhibition intact. There may be and there may not be odious comparisons, but it is comparison and competition in art which stimulate and educate.

Your third question is: I suppose that, for "old times' sake," we want to get a chance to see the time-worn exhibit of the Bugaboo Society; will that conflict with your plan in any way? By no means. The aforesaid society will willingly send on its collection (a little frayed and dog-eared, perhaps), and that, too, should be hung separately. Besides, many museums have antiquarian and freak departments.

If you ask a fifth question, whether the aforesaid society will get cross at you and will not invite you to play with them in case you send in your work for the "chain of salons," I shall have to ask



you once more to forget your personal vanities, and to work for the good of the cause, and in the end, you will be the gainer as well as those who gain by appreciating your work. Besides, there is a new national society which is quietly showing great strength, and which is conducted on liberal and unselfish principles. This society aims more at bringing out the talent of others than at self-laudation, and it will not neglect any thoroughly artistic picture-photographer who will let himself or herself become known to it.



HOME AGAIN

BY WM. ROWLEY

Finally: Why, if the idea is so good, has it been delayed? But, my dear reader, you are a little behind the times when you say that, and you forget that this is Anno Domini 1904. We are not in the palmy days of 1897, when there were only a handful to laud and hang one another—the work, I mean. But the thing is started, and properly, too. First, it was the Salon Club of America, which began with a print exchange, and found that there was far bigger game for it to kill. It has members in New York, Boston, Baltimore, Philadelphia, Chicago, St. Louis, Minnesota, Wisconsin, New Jersey, Illinois, Ohio, Michigan, Indiana, and now California, Oregon and Colorado are reaching out to it, and it is reaching out to them.

Early, a New York member realized that it was a photographic shame that no salon had ever, through certain photographic-political machinations, been held in that city, and he consulted with a Philadelphia member and discovered that the horrible thing which blocked the way was a hollow pumpkin with a tallow candle inside. With this enterprising and vigorous club, the Metropolitan, of New York, the second in size in the State and City, and with his affiliations in the Salon Club over the whole country, Curtis Bell organized and announced the First American Salon in New York; actually the first, for the metropolis; American, because of its connections, through the Salon Club, all over the land. He determined that a jury of artists other than photographic would be uninfluenced by scheming politics and personal vanities, and that, to obtain the greatest respect for the exhibition it was only needful that the jury should be great and distinguished enough. Precisely such a jury Mr. Bell obtained among his personal acquaintances in New York City, and, still further to secure the respect and assistance of the exhibitors of the country, he obtained as patrons of the exhibition, men of national reputation, the list of whose names fill one page of the printed announcement. Without having advertised the fact in any way, requests have been coming in from several of the greater art-academies of the country for the repetition of the exhibition as a whole. Probably, if San Francisco will ask quickly, it, also, may have this great exhibition for a time, with, or separately from its usual successful salon. Several have asked whether we were not afraid of dreadful things happening just because we were acting independently of the—you know the rest. The reply is, simply, that there is nothing whatever to be afraid of. The thing will be done thoroughly and well. The organization is perfect, and the principles are the right ones. The selection of work submitted will be rigidly artistic, but absolutely fair and impartial. There will be no "axes" of any kind. The most rabid antagonist will have the same careful courtesy given to his work, if sent, as the most ardent friend. If the antagonist abstains, so much the worse for him. Several capable people, five or six, may, perhaps, sulk, but there will be many to take their places, and the new man is the man to be reckoned with. It is the undeveloped power which counts, the unknown name which will win. The greatest picture in the greatest of exhibitions will probably be entered by a stranger, a man or woman unknown in exhibition photography at this moment.

Now, with this start, made in a quiet way, a "chain of salons" is no longer regarded as a dream. Photographic societies may now, with far less difficulty than heretofore, organize a series of fine photographic art-exhibitions, and they will find the Salon Club of America and the Metropolitan Camera Club of New York City, ready to co-operate with them and to meet them a little more than half way. Shall they hear from you?







## What Doctoring Can Do

On the opposite page are reproduced two pictures that reached the Editor's desk from *The American School of Art and Photography* some weeks ago. A letter of thanks with inquiries added, brought forth the following facts: The two pictures were sent to show how moonlight effects could be secured by employing an ordinary electric light. The original negative, as printed in the first example, gives a very pretty effect. The mass of white directly underneath the arc light is not displeasing, and, for an electric light picture, it is far from being a failure. However, the same negative supplies an excellent foundation for making a splendid moonlight picture, and the second example is given to show that Mr. Schreiber's judgment was well founded, and also to demonstrate to what extremes a negative can be altered to produce any effect desired.

The original negative was made by Mr. Patriarch, of Saginaw, Michigan, one of the students, and the work came to be done in this manner: After submitting the negative for criticism, Mr. Patriarch's next lesson included doctoring negatives. The one at hand being a suitable example, he was given the lesson on his own negative with the result as shown in the second reproduction. As can be imagined, the original negative was not destroyed nor altered. Transparencies were made from it and from them, new negatives, from one of which the second picture was printed, the duplicates being employed in order that Mr. Patriarch might follow the work at every step. His own rendition of the moonlight subject, which is reproduced, differing but slightly from that secured by the master, being equally pleasing and as truthfully presents the idea intended to be conveyed. The two pictures show, most conclusively, how satisfactory a moonlight effect can be obtained from an exposure made by electric light.

When it is realized how much the best workers both here and abroad are dependent upon the after manipulation of the negative for the success which they achieve, it is evident that too much importance can not be given this feature of the work. To say that the worker who has at his command these methods is not more advantageously situated than his brother photographer who must depend upon a straight print from an undoctored negative, would but invite ridicule. The worker who can best command the many possibilities of judicious after work upon the negative will achieve success just in proportion as his manipulative skill and artistic knowledge are made to assist one another. The possibilities that are offered in this direction are but hinted at in the reproduction on the opposite page, showing as they do but the results secured in working for one certain effect. Other and more radical changes could no doubt be shown as the result of well-directed work along this line. The prejudice which has heretofore existed against so-called "faking" is rapidly disappearing and in the face of a strong claim for recognition which its power for good makes possible, so-called "faking" will soon stand clearly as much a part of photography as the simpler processes of intensification, reduction and the like.

# Camera Jottings

*By* DR. H. D'ARCY POWER



WHEN, in the beginning of this year, I determined on a vacation in Europe, I resolved that photographic possibilities should be the first consideration in arranging my itinerary. I therefore decided on going over the Canadian Pacific, notwithstanding the long journey and the loss of time. The latter proved to be greater than I anticipated, but I was well rewarded as will appear later. Starting on May 15th, I spent a day in Sacramento, beautiful in its spring livery, and soon found myself renewing old acquaintanceship with Mount Shasta. There is little need to describe the ever-changing beauties of the king of Californian mountains. It was, on this occasion, more lovely than usual, in a magnificent robe of mist and cloud, and I did what I could in getting flying shots from a rapidly-moving train. Using a F. P. K. 3A with N. C. films and a color screen I succeeded fairly well in getting the snow and cloud effects, but the foreground was necessarily under-exposed. In work done under such circumstances something must be sacrificed, and as the character of high mountain scenery is essentially dependent on the snow and atmosphere, I believe it is better to use the color screen whereby they are excellently rendered, and do what is possible for the landscape by selective intensification. Such negatives, if a little over-printed, make very successful moonlight pictures. In a general way the exposure given was one-twentieth of a second, which, considering the reducing effect of the screen, is about equal to one one-hundredth of a second. This is really not enough, but with a moving train a speed of one-twentieth of a second is the least that can be given without the movement showing.

Over the State line in Oregon we met with magnificent atmospheric effects and a wealth of coloring that made us long for the advent of practical color photography. We spent a day at Portland, and I looked up the local camera club and found a well-appointed and seemingly active institution. Portland should be a good field for pictorial work. There are plenty of bits of striking scenery and an abundance of changing atmospheric effects. From thence northward to Seattle and the international boundary the general type of scenery changes but little, but so varied is it, long stretches of pine and deciduous woodland, alternating with flower-laden meadows and distant mountains, that we constantly regretted our inability to take more than flying shots at its recurring beauties. Northern Washington and the portion of British Columbia between it and the Fraser River are particularly beautiful, especially in color effects. We reached the Fraser River Cañon in the evening, and of what we then saw it is difficult to speak in reasonable terms. I have a fair acquaintance with river scenery. I know the beauties of the upper Thames in the fragrant freshness of early summer, I have passed along the Rhine on a winter night, when clad in a covering of snow its silent hills and ancient ruins seemed almost unearthly beneath the light of a full moon; I am acquainted with the over-praised Hudson, and know that wonderful stretch of river between Vancouver and the Dalles, where the Columbia, between enormous

flower-embroidered cliffs, flows with a majesty and beauty that, in a sense, is unequaled on earth, but for all these things there is language. For what the Fraser offered (and constantly offers) beneath the pale mists of that spring evening, there is no language. The Fraser Cañon is a jagged, twisted cleft between enormous cliffs of black rock, backed by forests of blue-black pine and over-topped by snow-capped peaks. For contents it has one of the wildest mountain rivers in existence, and a wealth of variegated vegetation that baffles description. The foreground rocks, piled in immense masses between ourselves and the river, were moss carpeted with old gold, shot with every imaginable tint of green, the water of the river a deep emerald backed by a mid-distance of silver-stemmed birch-trees, tipped with reddish buds and delicate green leaves, the whole set in a frame of somber pines toned to a deep blue by aerial perspective. Add to this color scheme the rush and roar and spray of a torrential river with a kaleidoscopic change of scene, all bound together by the soft mists of a spring evening, and it may well be doubted if any one could describe what we saw and felt. The failing light and the rapid motion made it impossible to attempt photography, and perhaps it was as well, but if any one seeks a photographic ramble where beauty, variety and majesty are matchless, let him not forget the cañon of the Fraser. We left California, and, in fact, the whole Pacific Coast, in the full glory of spring; when we passed the Fraser Cañon and awoke next morning we were back in winter, and we stayed there until we struck the leafy parks and golden meadows of the Old Country three weeks later. It is only when thus brought suddenly into contact with the East that we fully realize the privilege of living on the Pacific slope. The next day brought us to the region of the Shushwap Lakes with marvelous vistas of valley and mountain reflected in their depths. The general aspect is grand and stern, and vast areas of blackened stumps projecting through the snow from the base to the summit of the lofty mountains, tell of forest fires and give a forbidding aspect to what otherwise might be a scene of beauty. At Albert Cañon our train came to a stop with news of snowslides ahead, and we





turned out for a couple of hours' very welcome exercise on a perfectly flat plain surrounded by high mountains. Our train was carrying a party of Japanese officials and students, and three of their countrywomen, bound for the St. Louis Exposition. They took to snowballing as readily as if they had been raised in Canada, and did great execution, whilst one of their ladies taking four snowballs kept them simultaneously in the air in approved juggler fashion. Then we moved on to Glacier House, and here we were stalled for sixteen hours on account of a bridge destroyed by an avalanche. We took this delay philosophically, our patience much helped by the view we had of four carriages laying at the bottom of a ravine and reduced to very nice matchwood by a similar avalanche the previous week.

The next day, the bridge being repaired, we passed through the snowslide that had done the damage. It was practically a whole mountainside of snow containing dozens of immense pine-trees that stuck out from its broken surface like a forest of toothpicks. This danger once past the rest of the journey into the great Canadian plains was uneventful. The endless waste of snow that lies between the Rockies and Lake Superior offers little of photographic interest at this period of the year. Without approach to the latter, photographic possibilities increase. Lonely and often picturesque log huts are seen until they become the dominant form of architecture. We passed two settlements of Doukhobors, and we regretted our inability to stop and take pictures, for in the matter of quaintness they beat anything we have yet seen. At one of these we noted women wearing coarse, wide trousers, and a chemise outside. The Lake of the Woods district was very pretty, and in summer must have great photographic possibilities; at the time we passed (April 25th) everything was still covered with snow and the lakes solidly frozen. On one occasion we saw a large gray wolf, on another, a fox, crossing their surface. Finally, after passing the desolate region around Lake Superior, we entered the province of Ontario and returned to civilization. Comfortable farm-houses and broad, well-kept pastures mark the way to Ottawa



and Montreal. Arrived at the latter town we still found King Winter reigning, and as we had a week to wait for our boat we went down to New York. In our eastern metropolis the buds were swelling and here and there tipped with green, but we were met by cold, piercing winds and icy rain that made us sigh for a San Francisco fog as a comparative elysium. Still we spent a few very pleasant days in New York, and have to thank the affable secretary of the Camera Club, Mr. Boursault, and its eminent worker, Mr. Stieglitz, for a delightful visit. It is hard to be a photographic visitor to New York without contact with the clash of photographic schools, and, alas, of photographic politics. My personal sympathies with the men whose devotion and ability have placed American pictorial photography in the proud position it now occupies among the countries of Europe has been previously stated. I therefore learned with pleasure that the recent election had returned the control of the Camera Club to the party that in the past gave it members and standing. I returned to Montreal to find that my ship was icebound and I would have to wait another four days. It was no hardship, for we were in a most interesting city. Montreal is still an old French town; red-tiled houses, with the dust of a century or two, strange back courtyards, streets that are never straight, and churches of all kinds and ages, go to form a picture that is anything but American. Whilst English is universally understood, still the mass of the people of all classes converse in French, which, in a large part of the city, is the only language in stores and streets. Apart from the great interest of the streets and buildings, the surrounding country is exceedingly beautiful, and Montreal should be an active center of pictorial work. Strange to say there seems little activity here. I visited the Camera Club without being able to ascertain that any one was engaged in serious work. Perhaps I was unfortunate in the time of my visit—but not to speak of our city, San Francisco, of about the same size, it compared unfavorably with our smaller northern neighbor, Portland. In my next I will relate my experiences of an unusually interesting sea and river journey.



THRESHING IN MISSOURI

BY BELLE JOHNSON



PORTRAIT STUDY ON BROMIDE  
*by* E. N. SEWELL

# Bromide Work

By E. N. SEWELL

## PART II

### Apparatus

No attempt will be made here to describe the actual construction of the apparatus necessary to make enlargements except in a brief and rudimentary way. This is not a treatise on carpentry.

The easiest and simplest way is to procure one of the many types of enlarging boxes now offered for sale—the best being that of the Eastman Kodak Company—and then *follow implicitly the manufacturers' directions*. Enlarging by this means is purely mechanical as there is absolutely no chance for the operator to manipulate the result except by varying the development or time of exposure—dodging, or other means of varying the print being out of the question. But as a thorough drilling in the mechanics of the art is necessary, the method is probably the best for the beginner. The investment is small and will not be lost, for the same outfit may afterward be adapted to any one of the other and more advanced methods.

Next in order comes the method of adapting the ordinary hand-camera with bellows and focusing lens (the fixed focus boxes cannot be conveniently used). Right here is the place for a word of caution about lenses. The lens that you have in your camera is good enough—any lens that is free from defects and of not too short focus is good. The ordinary “rapid rectilinear” is ideal for this use. A wide angle lens of course will not do. If a special lens be provided it should be a fairly good one, rectilinear of course, with a flat field and of a focal length at least equal to, if not greater than the ordinary.

For daylight work choose any room the lady of the house will let you have. All the doors and windows or other openings admitting light should be *completely* darkened. Bromide is very good natured but won't stand the slightest white light. In the dark covering of one of the windows at a convenient height a hole should be cut of proper size, against or in which should be fitted a frame or some contrivance for holding the negative without admitting any daylight, except such as is intended to pass through the negative itself. Another (larger) hole may be cut in the same window covering, at a greater height and protected with two or three sheets of yellow, or “post office” paper. The purpose of this is to get sufficient light of the right kind to work by.

Enough red or yellow light may be admitted to make working easy as long the paper is not exposed directly to it for too long a time. However, the light from an ordinary candle will do the paper no harm if the candle be so placed that the paper is not directly exposed to it.

With the opening for the negative at the right height from the floor your camera, *minus the back*, and fastened to a box mounted on a table may be pushed up to the window until the open back fits against the negative with the lens pointing into the room. These remarks apply to any camera that has a removable back and focusing lens, whether *hand*, or *stand*, or *view-camera*. A hood of black paper or cloth should be fastened to the window covering, so as to fit around the

camera when it is in place. The box and the camera mounted on it should be firm and rigid so as not to be displaced by any accident, or during focusing. An easel may be rigged up in many ways, the simplest being to get a flat and smooth board large enough to hold the largest paper you expect to use, and fasten it to some support—say a box—so that when resting on the other end of the table that holds the camera, or on some other support, it will be directly in front of the lens and be capable of being pushed toward, or back from the lens. Needless to say the board should always be perpendicular and parallel with the negative. A large sheet of clean, white paper—white blotting-paper is the best—should be pinned on to the board so as to present a good surface to pin the bromide paper against.

The window selected should be a north one, if possible, as from that direction the most even light is to be had. Any other window *may* be made to serve the purpose, but no work should be attempted when the sun is shining on the window. The window should have no trees near it or other objects which will interfere with the light, either by absorbing it or reflecting it unduly. A dead-white reflector set under the window at an angle of say forty-five degrees, will be a great advantage if the window be too near the ground, a top floor window will not need it. So much for the daylight apparatus.

For working by artificial light the same apparatus may be used, but instead of backing the camera up against a window a light-box must be provided. The actual requirement here being to provide a source of light that after being properly diffused, or spread, by means of ground glass, tissue-paper, or the more expensive diffusing lenses known as “condensers” will still be strong enough to print in a reasonable time. It should be remembered that too weak a light will give harsh contrasts besides requiring long exposures. Detailed directions for the construction of a light-box for use of condensers will be found in the *Photo-Miniature* No. 16, “Bromide Printing and Enlarging.” The same box may be used and tissue-paper or ground glass substituted for the condensers. The ground glass is of course better than tissue-paper being less liable to damage. At least three or four thicknesses about one inch apart are necessary to diffuse the light, and should be placed at least eighteen inches from the light and be of a size several times larger than the negative. The box should be so arranged that the space between the ground glass and negative should be at least six or eight inches, in order that the grain of the glass will not be focused into the print. With such a box any light of sufficient brilliancy may be used, acetylene, electric arc, lime-light, or coal-oil. For the last named there are now several burners which give a very fine white incandescant light of great brilliancy, one manufacturer furnishing lamps, or if needed, complete enlarging apparatuses.\* So much for apparatus and construction.

## Manipulation

In the actual work of making the enlargement the negative should be placed in the camera (or in the holder in the window or light-box) upside down, and with the glass side toward the light. This arrangement will give you an image on the screen (easel) exactly as you saw it in nature and as you wish it in the print.

\* It is impossible in a magazine article to go into great detail in the matter of construction or kind of light or apparatus to be used, but any inquiry addressed to the writer, in care of CAMERA CRAFT, will be answered in detail.



Most writers give very careful directions how to obtain enlargements of certain sizes. I can safely say, pay no attention whatever to anything of the kind. Go at it the other way—the negative pleases you and you would like an 8x10 print—forget your mathematics and instead take a piece of pasteboard, or any old thing 8x10 in size and hold it on the easel, then rack out the lens until you see how the projected image fits the paper. If it's too large for the paper bring the easel a little nearer and rack out the lens a little farther. One or two attempts will



PORTRAIT OF MR. M.

BY E. N. SEWELL

give you what you want. Having determined the size, it is now necessary to bring it to a sharp focus.

Right here is a chance to study your composition. It is very seldom that the correct shape or composition of the finished print is coincident with the exact dimensions of the negative. Printing by projection enables you to choose just what you want out of the negative without subsequent trimming to the same extent as in contact printing.

From a 4x5 negative it's ten to one that you always make a 4x5 print and then neglect to trim it, if you do trim it the result is too small to be important.

### Focusing

A maximum of illumination is of course needful for focusing the image on the easel, so the lens aperture may be thrown open to the maximum, and when

using ground glass for diffusing the light all but one thickness may be removed. The image should then be focused (by racking the lens out and back) at some point near the margin of the picture on a piece of smooth, white paper held in the hand against the easel and moved from place to place, for if it is sharp there with the wide-open aperture it is bound to be sharp all over, but the reverse of this does not apply. There are some lenses, however, that will not admit of this, that is, there are some lenses with which the focus at  $F/4$  differs from that of  $F/16$ . It took the writer a long time to discover why a sharp focus at  $F/4$  gave a blurred print at  $F/16$ . The reason is one which should not exist, but for which the lens makers are responsible. The obvious remedy is to both focus and expose at the same aperture, and  $F/16$  is recommended as probably the best unless a smaller one be needful to cut down the time of exposure for a very thin plate. It is very difficult at times to obtain a sharp focus where clear lines are absent or the negative is dense, and some means of obviating this difficulty should always be at hand. After determining the proper relative positions of lens and easel for the size of enlargement needed, another negative which has sharp, clear lines and contrasts may be inserted until the proper focus is had. (No attention should be paid here to the size of negative or image, focus is all you are after now.) Such a negative is usually at hand or can be made by taking your camera and making a very short exposure on a subject having strong lights and shadows, and then developing it for contrast. It will not give you even a passable print but will be good to keep for the purpose suggested, and is much more easily made than a line screen. Those that desire a screen made especially for focusing enlargements should take an unexposed plate and fix it out in hypo, washing and drying it as usual. It may then be ruled with a ruling pen and india-ink, or some such preparation. The lines will stand out clear and strong on the easel when the screen is in place. The focus should always be determined at some point near the margin as before suggested. The printing negative may now be placed in position and all the ground glass replaced and you are ready for business.

The foregoing remarks on focusing are intended for the beginner's first lessons. He will soon learn that the most pleasing results are to be had through judicious elimination of focus. I recently read in an English work that no hand-work (meaning retouching or spotting) should be done on a negative intended for enlarging as it would show in an unpleasing way in a well-focused print. This is not so if the hand-work be properly done. But the writer of that work was speaking of portraits. While I am not a "fuzzytype" man, I consider a sharply focused portrait an abomination. A good portrait negative can be thrown so out of focus in projection as to eliminate all lines and evidence of hand-work and still not be fuzzy, or even appear out of focus if looked at from a proper distance. It will be clear and soft with qualities that a sharp focus would entirely destroy. Portraiture probably lends itself to this treatment more than landscape or similar work, but it is safe to say that the artistic quality of a print of any character can be improved in a majority of cases by a soft focus. The added atmosphere in a print is worth the loss of definition which is too often an offense to the eye. The trouble with most photographs is that the lens has caught more than the eye could, and has frozen it into a rigidity that needs softening out. But of course diffused focus is a secondary lesson and should not be attempted until one has advanced to it.

*(To be continued.)*

# CAMERA CRAFT

ISSUED MONTHLY BY

THE CAMERA CRAFT PUBLISHING COMPANY

114 GEARY STREET, SAN FRANCISCO

*Edited by* FAYETTE J. CLUTE

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## *Reduced Railroad Fares for Photographers*

CAMERA CRAFT is now in a position to announce that, as a result of no small amount of work, the possibilities of securing for the vast army of photographers the same concessions or perhaps better, that are granted to hunters, fishers and others on the railroads of the country. That the enthusiastic devotee of the camera in his search a-field for beauty as Nature places it before us can make himself one of the most potent advertisers of a railroad and its scenic beauties is undeniable. That he is an equally desirable passenger with those heretofore favored can hardly be disputed. That any favors shown will result in increased business to more than compensate for the reduction made, should seem self-evident. As the proposition now stands it is proposed that a reduction be granted to all photographers carrying a camera and showing a paid-up membership ticket in an established photographic society. The concession, if secured, will not only stimulate interest in photography but be productive of great good in the encouragement and upbuilding of local camera clubs. This last feature is in itself sufficient reason for the putting forth of the best efforts of which we are capable. Our success will mean not only the good of all but will give to the Pacific Coast and her railroads the honor of having first appreciated the importance of the matter.

## *Camera Craft's Position*

CAMERA CRAFT has been accused of this, of that, and the other thing. While praise has far outweighed the little that has been offered in the other direction, both are worthy of consideration. From time to time we have said a good word for the aims of the Photo-Secessionists, believing as we have that their work tended to the elevation of photography. There has been no partiality shown. Now that another body of men including, as it should naturally, a few who could not endorse the entire tenets of the other, have got down to serious work, space will be given them as unstintedly as is permissible. The position of CAMERA CRAFT is influenced by no partiality, no personal feelings or no desire to foster or popularize a plan or scheme of its own.

*The Fiasco at St. Louis*

Our enterprising contemporary, *The Photographer*, is doing a good work in giving us, under the above heading, an insight into the methods of the Exposition management in dealing with the photographers, not only of our own country but of the world. Our own workers, returning from St. Louis and their trip under the auspices of the California Camera Club, have voiced in no mild language their displeasure at finding photographic exhibits heretofore thought worthy of serious consideration in some of the foreign homes of art that have been used as salon headquarters, made use of at St. Louis as a background for a shoe factory in full operation. The case takes a still more serious aspect when we find a printer complaining that the incongruity of a quietly framed exhibit of artistic photographs crowded into close proximity to a high-speed printing press prevented, by its discordance, his full enjoyment of the displayed perfection of machinery for the production of the printed page.

*A Pacific Coast Photographer Honored*

E. S. Curtis of Seattle was selected by President Roosevelt to make a series of photographs during one of his recent trips as well as of his home and family at Oyster Bay. Mr. Curtis has just returned and reports that he secured a splendid series of negatives. Not alone his ability as a photographer but his close study of the Indian, an interest which the President shares most enthusiastically, made the combination a strong one and productive of the best results. The splendid series of Indian pictures for which Mr. Curtis is famed will be made the leading feature in early issues of *Scribner's*, taking the form of articles treating separately various groups; both the text and illustrations being supplied by Mr. Curtis.

*A Hint for the Manufacturer*

That two most important Photographic Conventions will be held on the Pacific Coast during the next few months should not be overlooked by the manufacturers desirous of reaching the trade in this territory. That the expense of making a display at them will perhaps be greater than at conventions nearer home is admitted, but the attendance, the enthusiasm and the sincerity of those interested far outweigh these considerations. Compare for a moment the attendance, reported as thirty-two, at a State Convention held earlier in the year in one of the Northern States with the crowded hall of our own last meeting of the kind. Realize, and realize fully, the fact that the agent of a certain lens manufacturing firm who took the opportunity to have his goods well displayed and exploited at this last convention of ours, reaped his reward in sales which exceeded during the next three months those of the preceding year in this territory. You may be sure the same firm will repeat their effort. CAMERA CRAFT suggests that the rest do likewise.

*The American Federation of Photographic Societies*

On another page, in Mr. Goe's department will be found a clear statement of the aims and purposes of this organization. That it is meeting with the hearty co-operation of pictorial photographers throughout the country as well as with that of the most enterprising and progressive photographic societies, is a most gratifying



indication that only the need of an energetic body of men to go forward with the work, has been lacking in the past. In Curtis Bell and the well-chosen lieutenants with which he has surrounded himself, the cause of pictorial photography has found a body to champion its claims worthy of its support. Its support has been given.

### *Our Two Coming Conventions*

The Fourth Annual Convention of the Photographers' Association of the Pacific Northwest will be held at Tacoma, Washington, from September 21st to the 24th inclusive. The Second Annual Convention of the Photographers' Association of California will be held at San Francisco on October 26th, 27th and 28th. The Secretary of the first is H. D. Trover, Salem, Oregon; and of the latter, D. F. Mullender, 121 Post Street, San Francisco. The enthusiasm which has heretofore been displayed has only acted as a stimulus which assures even greater things in the two Conventions so near at hand. The co-operation of every photographer in the territory included should be freely given. The educational features will be made even more attractive than on former occasions, and a much larger and more varied display is already assured. Manufacturers have awakened more generally to the fact that the attendance and enthusiasm shown warrant fully the extra expense of making a display so far from their base of supplies. All in all, these two Conventions should set a standard hard to excel.

### *A Danger Avoided*

The writer of "Piffle," a weekly department of most entertaining matter in *Photography*, recently devoted a lengthy paragraph to a humorous skit touching upon the experience of a photographer who possessed a cloud negative which he printed into everything. One of our esteemed contemporaries recently quoted from this department but with a forethought most consistent, neglected to include this paragraph. Three of its own illustrations in the same issue contained clouds from the same negative; two of them appearing on the same page. It is this and like dangers which CAMERA CRAFT seeks to avoid by using only original articles. Our own forethought is not trustworthy to the same extent, owing perhaps to the climate of California being less rigorous than that of Minnesota.

### *A Suggestion Wanted*

As a reader of detective stories, the advertisements of various "agenciees" promising to send a badge and a certificate purporting to make a full-fledged detective of me, appealed to me in my youth. A little later various other propositions were as temptingly displayed in printers' ink. Still later, in fact quite recently, we have been tempted and sorely so, to send five dollars and secure a certificate assuring, with all the conviction of gilt and scroll work, that the name penned in was that of a "proficient employee." Believing that the pages of CAMERA CRAFT are at least as good as those of any other photographic publication as a means of publicity, the idea at once suggests itself that something along the same lines might be launched most profitably. Will some of our most sanguine readers advise us just what kind of a certificate would most strongly appeal to their susceptibilities?

# Club Notes

## News Items From the Various Camera Clubs

*By C. A. GOE*

### Brooklyn Camera Club

This progressive club is now equipped at 776 Manhattan Avenue, with working rooms and a laboratory second to none in the metropolis. Their recent Annual Exhibition was a great success, the class of work exhibited being of the highest, and far excelling that shown at any previous exhibition of this organization.

affiliating with them, will make the Brooklyn Camera Club one of the strongest photographic clubs in the East.

### C. C. C. Print Exhibition

A very worthy collection of prints is now on the Club walls, the work of E. N. Sewell. It consists entirely of bromid prints and embraces landscapes, marines, portraiture,

## To Our Western Workers

Fayette J. Clute, the Editor of *CAMERA CRAFT*, and Charles A. Goe, Corresponding Secretary of the California Camera Club, have been appointed Pacific Coast members of the Salon Committees of the First American Salon and of the American Federation of Photographic Societies, respectively. Three sets of pictures are desired, viz: one for the First American Salon, another for the salon members, and a third for the exhibition members of the American Federation of Photographic Societies. Circulars will at once be prepared and mailed to all known exhibitors west of the Rocky Mountains. We would be pleased however to hear from other pictorial workers who have not previously exhibited but who might be induced to do so. As announced in our July issue, pictures may be sent to *CAMERA CRAFT*, 114 Geary Street, San Francisco, unframed and unglazed, to be sent to New York in one shipment, thus minimizing the cost of transportation and should be in their hands to leave San Francisco on November 1st. Mr. Goe's long identification with salon work as well as his wide acquaintance among exhibitors should be ample guarantee that all possible will be done to secure for the Pacific Coast and the good workers which it contains the representation that is so justly deserved.

The Brooklyn Camera Club has passed that trying period which comes to all such societies, and has settled down as a purely photographic club, which aims to foster and encourage pictorial photography. At the recent convention of the formation of the American Federation of Photographic Societies, this Club was represented among the delegates, and entered as an exhibition member in the Federation. This will greatly add to the Club's prestige, and with the prospects in the near future of another club

genre, etc., and is an exhibition well worth viewing. Mr. Sewell is advancing rapidly as an artistic photographer, and it is to be regretted that in this particular exhibition he attempted to show such a large number of prints; in fact, had he cut the number in half, leaving out a few that possess no particular artistic value it would have resulted more to his credit and to the greater benefit of those members who study composition from the prints on the walls. As a bromid printer Mr. Sewell excels.

## A National Photographic Art Movement

The American Federation of Photographic Societies is *un fait accompli* as its first proposer, Monsieur Demachy, will say when he reads of it. At least three other men were pushing the important movement—Mr. Clute of CAMERA CRAFT, Mr. Todd of *Photo Beacon*, and Walter Zimmerman of Philadelphia, at about the same time. The plans were good and have been unanimously endorsed by those taking part in the movement.

In Curtis Bell of New York was found the organizer and man of determination for

shall be forwarded to New York City, where it will be judged and selected by a jury of twenty artists of highest rank and reputation, who are absolutely competent to decide which pictures are worthy of admission, and there is no question whatever that these artists will keep their faithful promises and will serve. This is an important statement, for the suggestion is made to the contrary by those who would put obstacles in the way of the great Salon. After the New York exhibition a route list will be arranged, the same exhibition going to all cities whose camera clubs have participated in the movement. The membership has been limited to twelve societies in cities of over 100,000.



S. C. Bullenkamp Dr. W. J. Furness Curtis Bell W. T. Knox  
Dr. J. G. Miller Walter Zimmerman F. C. Beach Charles E. Fairman  
Daniel Baker John H. Thurston

President, and while others were thinking about it he announced the First American Salon of New York as a fact, and called a meeting of the representatives of the most important photographic societies in the East, to be held on the evening of June 28th in New York, which was attended by the following: C. E. Fairman, Washington, D. C.; F. Dundas Todd, Chicago; J. H. Thurston, Boston; Wm. T. Knox, Brooklyn; F. C. Beach, Toronto; Curtis Bell, Dr. W. J. Furness, S. C. Bullenkamp, New York; Dr. J. G. Miller, Daniel Baker, Adolph Petzold and Walter Zimmerman, Philadelphia.

The greatest undertaking was the organization of the "Chain of Salons." The idea is that the work of this country and Europe

Another very desirable feature of the Federation, in which photographic societies in cities of almost any size may join, is the Exhibition Organization. Such societies will receive four exhibitions or wall shows per annum, fifty pictures each, selected by the Art Committee of the Federation. Rudolf Eickemeyer, Jr., Chairman, from the best photographic art work of each year—two hundred pictures in all. Membership in this branch will give photographic societies unable to organize a salon of their own, the use of a large number of pictures of the highest grade. In addition to the salons and exhibitions the organizations joining in the movement will also have the lantern slide exchange and be members of the Historical

Section. There is another arrangement by which a member in good standing in any organization of the Federation may visit any other club in it, with the privilege of membership subject to the rules of each individual club.

The question of salon exhibitions is now simplified for committees and exhibitors; heretofore there have been conflicting dates, difficulty in securing the return of pictures for another exhibition, heavy express charges on accepted and rejected work to and from the place where the exhibition is held. By the new arrangement the exhibitor at twelve salons of the highest importance will pay the express charges to the first exhibition and from the last of them, all rejected work being immediately returned, reducing annoyance and expenses to the minimum.

If the exhibitor desire to sell his pictures he should provide additional prints exactly alike in mounting, printing, etc., for the local committee. It is more than likely that the whole of the exhibition will be bought up at New York alone. The advantages to the local committees are equally great, both as to quality of work obtained and the convenience of having pictures received and sent in one shipment. Of course if any of the societies belonging to the Federation desire to give a special exhibition of the work of its own members at the same time, such an exhibition, which would be hung separately, would add greatly to the interest created by the main exhibition. Photographic societies which are on good terms with Fine Arts academies, such as the Mark Hopkins, San Francisco, and Corcoran Gallery, Washington, have unusual advantages in connection with the plan.

The earnest co-operation of every art-photographic worker is desired. There is no promise of admission of pictures, but the promise is made that the artist who has never before offered his work will be placed on the same footing as that of the founders of the organization. When the pictures are placed before the jury no information will be given them other than the title of the picture, the jury not knowing the maker of the pictures they have selected until they read the names in the printed catalog of the Salon. Everything has to go through the door and nothing can go over the wall, either by "invitation" or in any other way. If these terms are not fair, what in the world can there be that is fair?

The officers of the American Federation of Photographic Societies are: President, Curtis Bell, 558 Fifth Avenue, New York; First Vice-President, Walter Zimmerman, Philadelphia; Second Vice-President, F. Dundas Todd, Chicago; Treasurer, John H. Thurston, Boston; Salon Director, Rudolf Eickemeyer, New York; Historian, Daniel Baker, Philadelphia; Chairman of Salon Committee, F. C. Beach, New York; Secretary, S. C. Bullenkamp, New York.

### C. C. C. Demonstrations

On the evening of Tuesday, July 26th, W. E. Dassonville delivered a lecture before the Club on the "Application of Artistic Principles to Photography." Mr. Dassonville is an old member of the Club and his ability as an artist-photographer was assurance enough to the members to fill the rooms with an audience desirous of securing such instruction as he could give them. While Mr. Dassonville did not adhere strictly to his subject the information he gave on exposure, development, and the various methods of printing, proved of great value and can only result in profit to those who were privileged to hear Mr. Dassonville.

On behalf of the Demonstration Committee the Chairman, Mr. Sewell, has announced the following dates: Saturday, August 20th (afternoon and evening)—Harry Lovick of the Eastman Kodak Company on Velox. Late in August—Gilbert Hassell on "Exposure." Early in September—Gilbert Hassell on "Development." Late in September—John Beebe on "Lenses," and others.

Classes have been formed under the direction of the Committee and on Tuesday evening, August 2d, Mr. Sewell was the instructor in Bromid work, following it up on August 15th with a class in Velox printing. This series of instruction will cover all branches of photographic work, each class being limited to six members, and from the large number of names registered with the Assistant Secretary of the Club the success of this venture is assured. The Committee deserves commendation for this much-needed help to the new members entering the Club.

### New Secretary

At the last regular meeting of the California Camera Club, W. E. Dassonville was elected Secretary to fill the vacancy made by the resignation of Mr. Palmer.



# A Photographic Digest

By H. D'ARCY POWER, M.D.

*All communications for this Department should be addressed to H. D'Arcy Power, M. D., 114 Geary Street, San Francisco, California. The Files of the Digest Department contain practically a complete set of Foreign photographic publications. These are open to CAMERA CRAFT readers for reference or loan.*

## Interior Photography and Small Stops

F. H. Evans has been contributing to the *English Amateur Photographer* a series of very valuable articles on the subject of interior architectural photography, illustrated by splendid examples of his own work, that leave no doubt in the mind of the reader that his precept rests on a foundation of more than successful practice. In one of these articles the writer deals with the question of small versus large stops and his words are well worth considering, not as a rule of general photographic practice, but as the truest method of expressing the spirit of architectural beauty. He says: "I regret to say I have no sympathy with those who advocate large apertures to secure artistic treatment. This belief has no foundation in fact. Artistic success is not got so cheaply as all that; artistic success comes from proper choice of subject, proper care in composition, proper state of the light in which the exposure is made, and a properly full exposure on the right sort of film with the right screen. If these little items are rightly managed, the stop may be F/32, F/45, or F/64, without any difference in the result, especially if the print be made on a proper texture of paper, such as C. C. platinotype, that enormously valuable gift to the pictorial photographic worker.

"Nothing is more destructive to artistic success, or annoying to the normal eye, than bad focusing with large apertures; and as the planes in interior work are so many, and of such great depth, it is absurd to sacrifice any one or more of them for the benefit of the others, when such a moderate stop as F/32 will mostly bring all planes to a reasonably detailed focus, and produce a picture that cannot on that score be accused of being unartistic.

"If a doubting Thomas reads this diatribe on the error of using too large stops, and smiles in a superior fashion, let him try the experiment of taking the same (properly lit) picture at F/8 and F/32, choosing a subject containing widely divergent planes, and print both negatives on C. C. platinotype paper; if he then submits both to a trained artist for criticism, he will be astonished at the verdict, if, that is, he does not previously decide for himself for the F/32 sample."

This is very much the same view as I advocated in a past article on the use of the pinhole in dealing with cathedral interiors, in which I think the small sizes should be used.

## Dr. Gasser on Gum Printing

Dr. Stephen Gasser's paper in the *Photographische Rundschau* on "Errors and Fallacies in Gum Printing" is a decidedly dictatorial pronouncement on the subject, which, however, is worth careful reading and consideration because the work seems to have been scientifically done by photometric methods. Nevertheless it is not certain that the writer has not added to the errors he proposes to correct. For example, it is dogmatically stated that the use of ammonium in place of potassium bichromate makes little difference in sensitizing. Speaking from no little experience, I have no hesitation in saying that the printing time is greatly shortened with the ammonium salt, and the film much tougher so that a brush development which would be ruinous to a print sensitized with the potassium salt is easily carried out with the ammonium. I have always followed Demachy's directions in this matter using the ammonium salt for brush-developed pictures, and

the potassium salt for water development, but in the case of the former I have not found it necessary to add chromic acid as Demachy advises.

In regard to the quantity of bichromate used, Dr. Gasser is emphatic in stating that except for loss of sensibility, and need of corresponding excess in exposure, the amount may vary from one-half to forty parts to a hundred of water without effect on the image. This may be true, for I cannot assert the contrary, but when the writer says that the variations in the quantity of gum from five per cent to fifty per cent does not materially affect the character of the image, it will be difficult to get practical workers to agree with him, for the general experience is that too little gum causes flattening of the picture by retention of pigment in the high lights. Dr. Gasser condemns the use of other colloids such as gelatin, starch, etc., in addition to the gum. He denies that they increase the half-tone, and in more than one place enunciates the doctrine that the value of gum printing is to suppress half-tone. Surely that is a minor value and not a character of the process. There are cases where the suppression of half-tone is of artistic value, and the gum expert can use the process to attain this end in a way impossible with any other; but such a use is exceptional, and some of the best gum workers have habitually preserved the most delicate half-tone, for example, Demachy and Puyo. There is an unfortunate tendency for the Teutonic vision to be limited to the borders of the Fatherland, it crops out in the writings of Dr. Gasser when he states that "Single printing is now little used."

Dealing with the subject of the continuing action of light Dr. Gasser states that this action is limited. For the first two hours it is equal to one degree of Vogel's photometer, and ceases after twenty hours when it is between two and three degrees. In regard to the best time for printing it is stated that the paper is most sensitive shortly after coating, when the film is no longer sticky, but the paper is still damp. This is exactly my own experience, and I believe that the best results are then obtained. The writer states that further drying diminishes the sensibility, and damping the paper again increases it. There is little doubt but that this is true, as the same thing occurs in carbon printing. On the subject of exposure the writer takes

practically the same ground that most experts in other printing methods adopt, namely, it is all important, and errors therein can only be slightly rectified by subsequent development, to all of which I am content to add a fervent "Amen."

It is maintained that while development is the most essential of the factors in determining the character of the image, the same is also largely influenced by the paper, color, and sizing, these latter affecting both the number of the half-tones and the purity of the image; thus insufficiently sized paper may give rise to partial reversal, whilst rough paper increases the length of the tone scale. Finally, the writer asserts that the maximum of detail is obtained by floating the print on cold water, whilst the maximum of half-tone is secured by spraying the print without previous soaking.

### Plates Fogged in the Camera

The *British Journal of Photography* draws attention to the danger of leaving plates for any length of time in even light-tight cameras in consequence of emanations from varnishes used on the interior. Dr. Russell, who investigated this subject some time ago, states that the chief cause of this chemical action is turpentine, which is much used in the making of black varnishes. Furthermore, it seems from the experiments of Herr Van Aubel that resin also is a cause of fog, and that not only is this used in many varnishes, but it is used in India to adulterate shellac, thus introducing an unexpected danger.

### A Sensitizing Bath for Carbon Tissue

M. Vaucamps, writing in the *Moniteur de la Photographie*, gives the following as conferring a high degree of sensitiveness to carbon tissue:

Bichromate of potassium.....	80 gm.
Hot distilled water.....	1,000 c. c.
Bicarbonate of soda.....	2 gm.
Bromid of potassium.....	1.5 gm.

Mix in the order above stated, taking care that the bichromate of potassium is completely dissolved before the other ingredients are added. Care must be taken not to use the solution until it is quite cold.

Sodium bicarbonate has been previously advocated as a means of increasing the stability of carbon tissue, and increasing contrast, but I imagined that this was at the expense of its sensibility to light.

# The Amateur and His Troubles

By FAYETTE J. CLUTE

*This Department is especially intended to assist the beginners. However, many of the more experienced workers also make mistakes. All readers of CAMERA CRAFT are invited to tell Mr. Clute their troubles. Address all communications to Fayette J. Clute, Editor of CAMERA CRAFT, San Francisco, Cal.*

## "A Few Wrinkles"

One of my correspondents sends in an article with this caption but gives no name or address except Cherokee. There are just seven postoffices by that name in the last postal guide. If my correspondent will advise me which one he claims as his address I will be only too glad to answer his letter.

## Another Method of Photo Sketching

One of my most valued correspondents who has given me many good hints in the past, is Ray Kerr, of Eugene, Oregon; in a recent letter he says:

"In the March issue of CAMERA CRAFT appeared a very good article on photo sketching, but the method there given while presenting many points of excellence has the disadvantage of requiring that the user thereof sensitize his own paper. The horror of the average amateur for this operation as well as for the complications too likely to accompany the work, causes him to leave the process alone despite the fact that he often desires to make sketches in some such manner.

"The following method will give equally good results and recommends itself on account of its simplicity: Print a sheet of ordinary blue-print paper under the negative to about half the depth required for a good print. Develop as usual and dry between blotters. When dry, sketch in the lines as desired, employing water-proof ink. Lead-pencil, charcoal, or crayon may be employed if desired, but the results are not so satisfactory. The sketch finished, place it in a ten-per-cent solution of sodium carbonate in which the print will bleach out entirely, leaving only the sketch. Rinse in water and dry. The only caution to be observed is to allow nothing to touch the face of the work if crayon has been employed. Where pencil

or charcoal has been used some care is also required. Variations of the process can be used to produce composite pictures and as a method of 'building up' advertising matter it should commend itself to the man so interested."

## A Comfortable Closet

One of my amateur friends found he could not stand the pressure of being confined in a closet in company with a ruby lamp for more than a half hour at a time, particularly as no ventilation could be secured. The house being a rented one, he did not feel that he could saw the requisite opening for either a ruby window or a ventilator in the door, much less in the wall. Why couldn't he buy a door of his own? He did. The standard sized doors do not cost much at the mill and so he promptly invested in one. A trapped opening was made top and bottom to permit of ventilation. Another opening, cut at the requisite height, was glazed with a sheet of ruby and one of orange glass. A small folding shelf placed on the outer side permitted an ordinary lamp to be placed where it could cast its light through the colored glass and allow him to work in comfort impossible with a light on the inner side of the door. Most house doors lift off their hinges quite easily and if the hinges on the substitute article be rightly located it is but the work of a moment to make the change. Another advantage of this plan lies in the fact that if it be found necessary to ornament the edges of the door with a strip of thick cloth to prevent light leaking in, the work can be done on the substitute article where the unsightliness of the decoration might forbid its being employed on the regular occupant of the door casing. The idea is certainly a good one and applicable in a great many cases.

# With the Process Workers

By WILL SPARKS

*In this Department questions addressed to CAMERA CRAFT, regarding photo-engraving, will be answered with care. Due research will be made wherever it is necessary for a correct answer. The experiences of printers and engravers are requested, and any suggestions will be gladly received. An effort will be made to supply the best information obtainable regarding the working and development of the three-color process. If you have any unusual experience with your work or have trouble with your chemicals, write to The Process Worker, CAMERA CRAFT.*

## Hand-Feed Lamps

As a general thing Pacific Coast photo-engravers look with disfavor upon the hand-feed lamp. Why this is so I am unable to find out for the reason that everybody who uses a hand-feed lamp is satisfied with it. Many workers will cry out loudly against the hand-feed lamp, but come to find out their experience and it develops they have never worked one. All they know is what they have been told. The truth is the hand-feed lamp has unjustly received "a black eye." The fact of the matter is that the hand-feed lamp is as good as any other when it comes to actual work. The automatic lamps are a little more convenient, but they need attention at times. And then they have that tendency to get out of order with the consequent repair bills. Of course it's a little bother to adjust the carbons of the hand-feed lamp for every exposure, but this is compensated for in many ways. The hand-feed lamp will burn about ten minutes, it never gets out of order, it will go out when not wanted and so save current, and, besides, it costs less than the others.

## Etching Half-Tones

The following translation in the *Process Photogram*, from E. Klimsch's *Jahrbuch*, is a valuable and practical bit of information for any photo-engraver: "The sensitizing solution must not be used as soon as made, for the print then easily leaves the plate. It is ready for use after standing three days, and keeps for a month or less, according to the way in which it is stored. A copper half-tone is scarcely ever made at a single etching. The reason for this is

that only the surface of the dot is covered with the enamel resist, and hence, after the first etch, the sides of the dot are attacked by the etching fluid. This brings about a general reduction of the total area of the dot, so that while in the etching bath a continuous lightening of the whole image is bound to take place. In the case of originals with not very deep shadows, the necessary printing strength may be frequently obtained in one etching by making a correspondingly darker print. But with prints of deep and modulated shadows this is not possible, as the fine white dots in the shadows would be greatly over-etched. The rule is that the first etch should be long enough to give the shadows their proper printing strength. If it is seen from the proofs, in spite of sufficient etching of the shadows, that the latter are still too dark compared with the original, the plates can be taken further in the bath until they are sufficiently lightened. If, on the other hand, they are lighter than the original, the etching has obviously been too long and the shadows will have to be burnished to remedy the error. If the plate undergoes a quiet etching, the result is quite different from that in which the etching bath is kept in active movement or is brushed over the plate. In the former case, the side-way action of the bath compared with its perpendicular action is much less than the latter, for the movement of the bath or the application of the brush favors the etching of the open dots far more than that of the closed dots of the plate, as the first exposes many more points of attack than the latter. Through this intensified side action a brighter effect is given to all the tones, the etch taking place more slowly in the shadows and more quickly in the high lights."



### New Sensitizer for Red Rays

The latest color to be recommended for staining dry plates and rendering them specially sensitive to the red rays is called "Pinachrom" by the makers, who are Messrs. Meister, Lucius & Bruning, of Höchst on the Main. Messrs. Fuerst Bros., of London and New York, are the agents. "Orthochrom T" is another sensitizer that has been recently introduced as being an improvement over all preceding ones, but "Pinachrom" is said by those who have experimented with both to be superior to it.

### Spreading Technical Knowledge

The New York Board of Education, that gives popular lectures to the people closely allied with their daily labor, has decided to include photo-engraving and photo-lithography. The lectures are to be illustrated with stereopticon views and will go into all the details of the processes.

### Sunlight for Color Work

As a general thing photo-engravers accept the idea that sunlight is best for making the filler negatives for three-color work. "It is and it isn't." A photo-engraver who attempts to work in sunlight must use a good deal of judgment or he will have a great deal of trouble, unless it happen that a train of luck is following him. Sunlight varies more than arc light, and it will not do to trust your eye to tell how white the rays are. Of course it's a pretty good idea to make the negatives in the middle of the day when the sun is highest, but even then there is liability of error. Arc lights contain too many violet rays and ordinary daylight contains too many yellow rays, both of which have their effect on the color screen negative, as can be proved by exposing the same copy under the two conditions through a yellow screen. With a red screen the difference is more decided, but that is not necessary to a test. The only exact method of testing the sun's rays is with the spectro-scope, but of course such a piece of apparatus is out of consideration in an engraving shop. What the engraver wants is to find out when his light is at the point that he knows suits his color screens. The simplest way of doing this is to get a piece of orange-colored glass, cut to fit a 4x5 printing-frame. Place this in the frame and on top of it put an ordinary negative of good quality, landscape preferred. Now put in a piece of solio paper and make a good, strong print, watch-

ing carefully to see how long it takes. If you then make a set of negatives and find them to be all right, you will have a standard for all future work. A few trials with this simple arrangement on different days will soon show what a great difference there is in sunlight, even when none is apparent to the eyes.

### Three Colors at One Impression

At last a press has been perfected that will print three or four colors from half-tone plates at one impression; or to speak more correctly at one "travel" of the press, for, of course, there are as many impressions as there are colors but the paper goes through the machine only once. This remarkable machine, the invention of Harvey Dalziel, Plough Court, London, England, has been on exhibition in the British metropolis for about a month and the work turned out is a surprise to the printing fraternity. Some printers were so surprised at seeing a white sheet of paper put into the machine and in a few seconds later come out with a beautiful picture in all the hues of science that they were even incredulous. One printer said it must be "magic" and would not believe he was not being "faked" until he marked a sheet before putting it into the machine to avoid substitution. In general appearance this machine resembles several cylinder presses all bunched together, but from all accounts it is really the inks they use and their method of putting them on that is the "secret" of the process. The general American process of yellow, red and blue seems to have been abandoned. If three colors are used the new machine begins with blue and follows with the red and yellow. If four colors, they begin with the black or tint and follow with red and blue and finish with the yellow. These new inks are said to be absolutely transparent and as a consequence can be used in almost any order the printer desires. In reality it has been the opacity of the yellow that compelled printers to proceed with yellow first. But yellow is a bad dryer, so the new machine prints the yellow last and thereby avoids excessive dampness at the start. The work produced by this machine is certainly far above the average turned out in the ordinary printing office but does not come up to the work of the specialists. However, the machine is new and perhaps that will be remedied. And when it is the passing of the black and white picture will have begun.

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Running serially in *Field and Stream* is the fascinating story of Alvah D. James and his brave comrades on their trip "Over the Andes and Down the Amazon." Beset by difficulties at every hand, these brave fellows pushed their way across the heart of South America from the Pacific Coast to the Atlantic, and the Kodak has graphically assisted the facile pen of Mr. James in the telling of the thrilling story. Visited by misfortune after misfortune the end seemed to have come when boat, provisions, guns, everything, was lost in the rushing Esperenza rapids of the Pichis river. For two days the sufferers pushed on along the banks without food when they came upon a grove of green bananas. Here was nourishment to keep body and soul together and with nothing but their knives they constructed a raft, taking ten days for the work—on this raft loaded with bananas they drifted on, suffering from fever, weak with work and worry, surrounded by disgusting reptiles, pestered by insects, threatened by alligators and beasts of prey. To quote from the author's narrative:

"But I have neglected to mention the finding of my 'literary bag.' This was a canvas bag made for the purpose of carrying my wares, including one or two books, a 4 x 5 Eastman Kodak, pencils, pens, paper, maps, and so forth. Henschen found it one evening with a little balsa log attached to it, just as I had arranged it when we kept our money in it. It had drifted down the stream and lodged against a fallen tree. Henschen was delighted at rescuing the camera and an air-tight tin of unexposed films. \* \* \* \* \*

While we were making our way down the bank of the stream our minds were continually occupied; as, of course, was also the case during the building of the raft. But now we could sit and think—think by the hour. Ewart dreamed of sandwiches more than ever; Cash offered anything from a finger to both legs—according to his mood—for a smoke, and Henschen filled in his time tinkering the little water-soaked kodak which he found in my literary bag. Nor was his time wasted, for the clever fellow took out the lens and holding it so as to focus the rays of the sun upon one tiny spot, he made fire. We were jubilant, and we now had banana fritters to eat. Banana fritters indeed;—no one can realize the irony of it. But the pitiful picture of the pinched faces of my companions, and their emaciated hands, as we ate those first banana fritters will never fade from my memory. I doubt very much if, of all the many thousands of lenses manufactured by the Eastman people, any other was ever so useful as that little lens so carefully treasured by our singing bachelor photographer.

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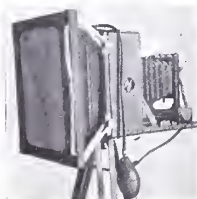
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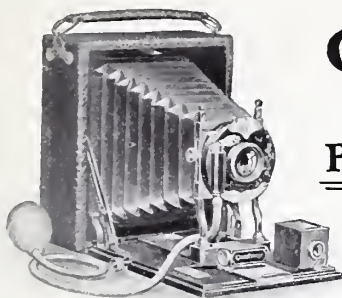
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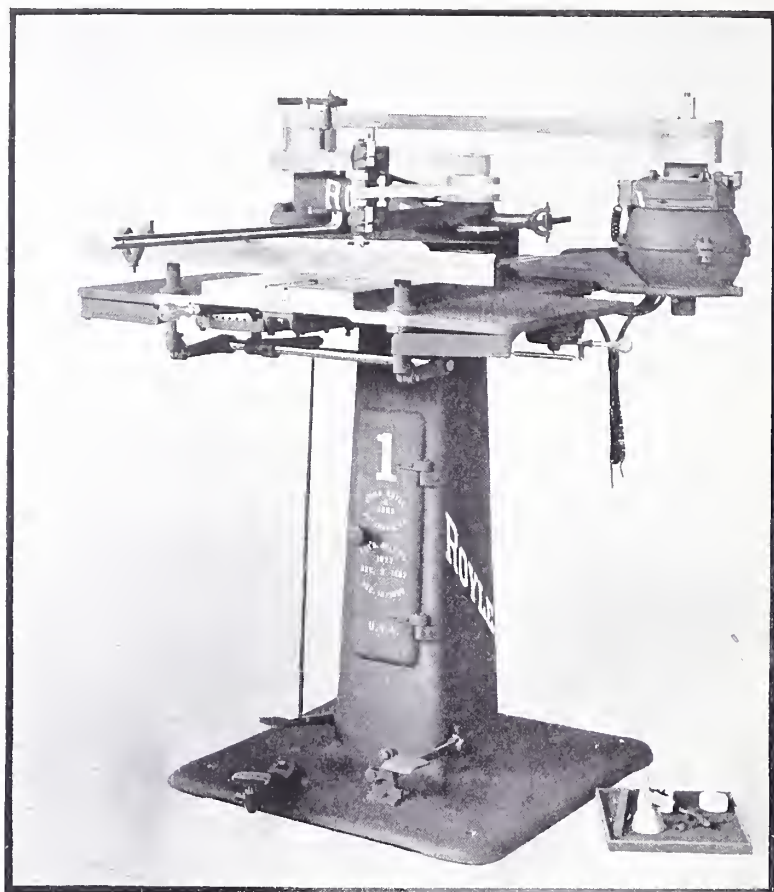
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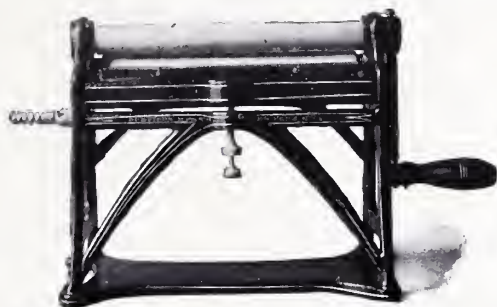
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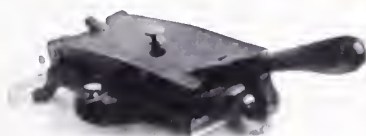


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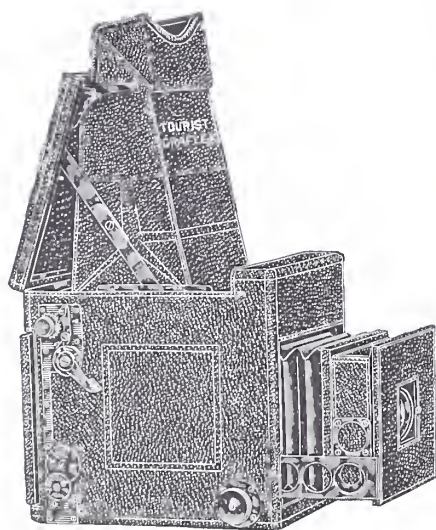
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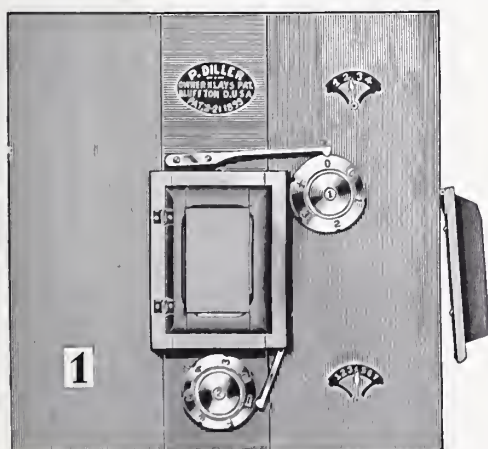
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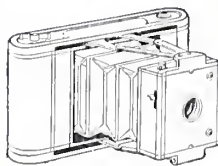
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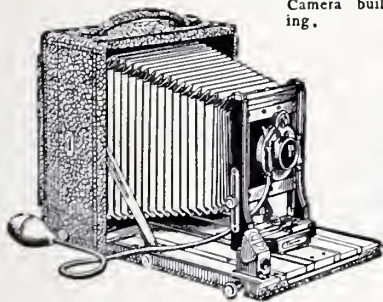
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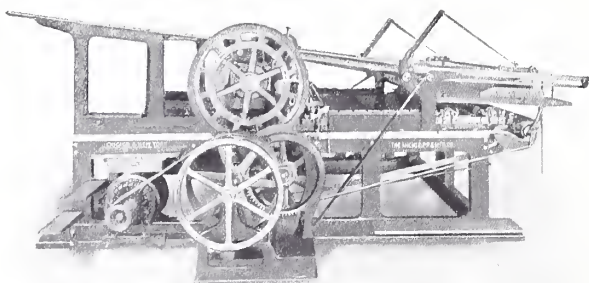
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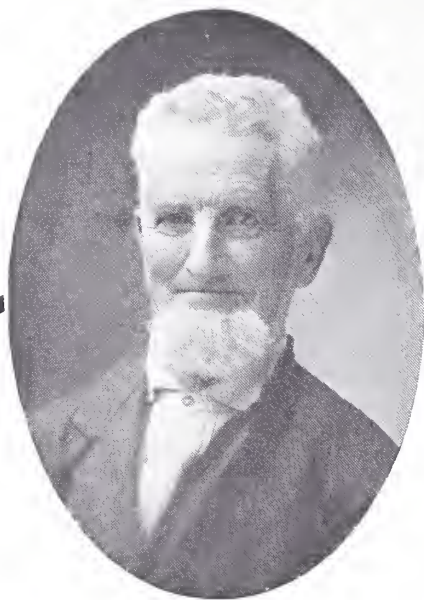
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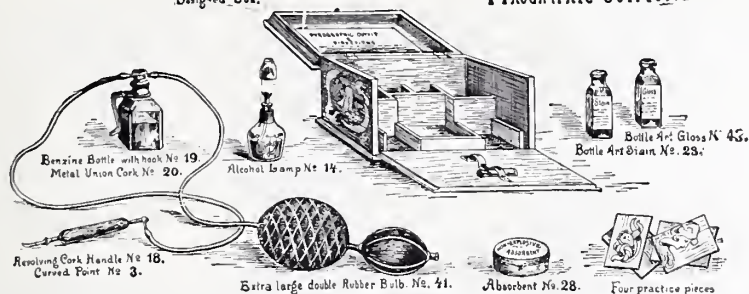
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